DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE

DIRECTORATE OF RESEARCH

A CONTENT ANALYSIS OF WRITTEN COMMENTS TO THE SENIOR LEADER EQUAL OPPORTUNITY SURVEY(SLEOS)

by



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A Content Analysis of Written Comments to the Senior Leader Equal Opportunity Survey (SLEOS)

Abstract

A content analysis was conducted on responses to six open-ended questions of the Senior Leader Equal Opportunity Survey (SLEOS) of senior military officers and Senior Executive Service individuals. The questions dealt with perceptions regarding Equal Opportunity practices within the military. A categorization scheme was developed and was shown reliable (r = .67) based on 30 cases coded by two independent judges. Leadership, EO training, and education in general were mentioned frequently as strengths in current EO efforts. EO issues mentioned frequently as areas of concern were promotion opportunities and downsizing, sexual harassment, gender and racial bias, and reverse discrimination. Factor analyses revealed both areas of overlap and areas of independence between the 38 open-ended responses and the 24 more objective "equal opportunity perception" items of the SLEOS. An additional relationship was observed between the EDUCATION factor and leadership style as indexed by Fiedler's "least preferred coworker" (LPC) index. SLEOS recommendations include consideration of alternatives to the LPC measure and expansion of measures in three areas: a) expressions of frustration with EO programs, b) issues of sexual harassment, and c) the role of leadership in EO effectiveness.

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The opinions expressed in this report are those of the author and should not be construed to represent the official position of DEOMI, the military services, or the Department of Defense.

A Content Analysis of Written Comments to the Senior Leader Equal Opportunity Survey (SLEOS)¹

I. Introduction and Background

In March, 1994, the Secretary of Defense issued a memorandum which set up a number of changes in the equal opportunity (EO) programs of the Department of Defense (DOD). One of these changes was to mandate senior executive level training, to be conducted by the Defense Equal Opportunity Management Institute (DEOMI), for all new general and flag officers within the Services and for all new members of the Senior Executive Service as well. Since that time, additional other higher grade officers (O8, O9, and O10 levels) have also availed themselves of the senior executive level training on a voluntary basis.

As one component of the senior executive level training, DEOMI developed the Senior Leader Equal Opportunity Survey (SLEOS). The SLEOS was designed to be a part of the curriculum for the two-day courses and was geared to provide an opportunity to gather the EO views of the participating senior officers. The three purposes of the survey were: 1) to allow planning for the two-day senior executive level training curriculum; 2) to provide feedback to each senior executive level class concerning their EO perceptions and the EO perceptions of other senior leaders and military members; and 3) to create a frame of reference for briefing the officers concerning the results of an independent survey, the MEOCS (Military Equal Opportunity Climate Survey), which at the time of the present writing has been administered to nearly 400,000 military service members. Detailed documentation of the MEOCS can be found in Dansby and Landis (1991) and in Landis, Dansby, and Faley (1993).

The choice of content within the SLEOS was guided by three general considerations, namely, 1) commonality to the MEOCS, 2) relationship to prior senior executive level survey work, and 3) research goals concerning the relationship between leadership styles and EO perceptions. Specifically, factor scale scores from the MEOCS which bore high alpha (reliability/reproducibility) coefficients were included in the SLEOS to permit direct comparisons between MEOCS scores (called EOCLIMATE) and the EOCLIMATE responses on the SLEOS. (Scores of both individuals and senior executive level classes can be directly compared on the basis of MEOCS EOCLIMATE scores.)

The primary source of historical data concerning senior executive officer EO perceptions was a survey of 252 Navy flag officers reported by Gentner (1985). Recommendations of that report suggested the importance of including measures of EO perceptions, issues of concern, and standard demographic items in any survey of senior executive officers. Research thrusts within the SLEOS centered on the Fiedler (1967) model of leadership and the least-preferred coworker (LPC) construct, which can be measured efficiently by responses to a brief set of items.

Participants in the senior executive level classes are provided individualized feedback concerning their SLEOS responses. Because of the construction and structure of the SLEOS, feedback can be (and is) provided relative to three frames of reference: the MEOCS responses of other military service personnel, the SLEOS responses of their own senior executive level class, and the SLEOS responses of all senior executive level classes (over 345 cases at the time of this writing).

The remainder of the present report is designed to summarize aspects of analysis of the open-ended comments on the SLEOS. Sources of other, similar content analyses are indicated; aims of the present report are enumerated; and methods of analysis, results, and conclusions are given in the report sections to follow.

¹ Appreciation is expressed to Drs. Judith Johnson, Dan Landis, and Robert McIntyre for their assistance throughout this project. Thanks is also provided to three institutions, DEOMI, American Society of Engineering Education (ASEE), and Oklahoma State University, for their role in facilitating the present research efforts.

With these goals in mind, the following injunctions of W. E. B. DuBois seem particularly appropriate,

Awful as race prejudice, lawlessness and ignorance are, we can fight them if we frankly face them and dare name them and tell the truth; but if we continually dodge and cloud the issue, and say the half truth because the whole stings and shames; if we do this, we invite catastrophe. Let us then in all charity but unflinching firmness set our faces against all statesmanship that looks in such directions. (DuBois, 1911).

II. Related Content Analyses of Written Comments

Analysis of written comments to the Military Equal Opportunity Climate Survey (MEOCS), which has been widely administered to military personnel to assess the human relations climate of military units, was completed by Grosch (1994). That analysis not only tapped EO concerns, but also addressed common concerns with the MEOCS instrument itself.

Similarly, Popovich (1988) examined 163 sexual harassment complaints filed in the Air Force in FY 1987. That study indicated characteristics of the complainants/victims, the alleged offenders, the complaint situations, and the outcomes of the complaints. Similarity to civilian harassment complaints was shown and the implications for sexual harassment training were discussed.

III. Aims

The primary purpose of the present study is to code, categorize, and summarize responses to six openended questions on the Senior Leader Equal Opportunity Survey (SLEOS) by a pool of 324 respondents. Frequencies of the perceptions of various EO concerns, strengths, and issues are to be tabulated and examined for patterns and trends.

A second purpose of the present content analysis is to relate the responses on the open-ended questions to other variables on the SLEOS. The latter fall in three broad categories, EO perceptions (EOP items), MEOCS EO climate scores (EOCLIMATE), and Fiedler's "least-preferred coworker" scale (LPCSCALE). Intercorrelations of the open-ended responses and other more quantitative aspects of the SLEOS will also be examined.

The present analysis is also expected to indicate possible improvements of the SLEOS. Thus a third purpose of the present research is to consider ways to expand, reduce, or modify the current SLEOS package.

Finally, efforts will be made to integrate the summary of the open-ended questions of the SLEOS into a picture of current trends in EO issues within the military today. It is expected that this picture will indicate new issues looming on the horizon as well as suggestions for improvement of current EO practices.

IV. Disclaimers and qualifications concerning the present investigation.

Three strong qualifications on the data and conclusions of the present report must be acknowledged, namely, distortions produced by the data classification process itself, loss of information concerning individuals based on hasty generalizations concerning broader group trends, and claims of statistical significance. These are each discussed in the remainder of this section.

Generic classification ambiguities: There are numerous ways biases may creep into any investigation, but content analyses are particularly sensitive to distortion because of the subjective character of the classification process. Particularly troublesome are categories in which both expressions of concern and expressions of support get blended together. For example, when asked, "What are the significant EO issues facing your agency today?" one respondent might say EO training needs enhancement and a second might comment that there is a need to reduce EO training emphasis. Unfortunately, both of these responses fit neatly into the "EO training" category and the two opposite sentiments each enhance the identical response category.

Other responses yielded tallies in several categories. The response, "glass ceiling," for example, resonated responses to the following categories: a) opportunities/promotions /retention, b) racial discrimination, and c) gender discrimination.

Still other responses simply do not fit any of the standard categories. For example, if "women in leadership" is mentioned as an EO issue, does that mean the respondent felt concern for opportunities and promotions of women, concern for gender discrimination, or expression of leadership issues vis-a-vis EO? Liberal use of the "other" categories was made in order to minimize these classification problems, but errors of judgment are inevitable. It is hoped, however, that these errors did not introduce systematic bias. We must admit, however, that there are limits to the precision possible.

Characterizations of individual responses based on group responses: It is easy to lose sight of individual responses when aggregate responses are examined. Thus, most of us are aware that the group seldom speaks faithfully for the individual, yet our minds will frequently go beyond the data given in a natural rush to generalization. Throughout examination of the present summary statistics, the reader is urged to exercise extreme caution in relating these trends to any single individual or even to a subset of the individuals represented here. It is simply too easy to lose sight of the ideographic response when examining nomothetic trends.

Claims of statistical significance: Whenever a large number of statistical tests are undertaken, a number of these will yield statistical significance on a chance basis. To protect against this, the conservative Bonferroni procedure was applied to protect against spurious claims of significance. In a few cases, direct probability values are reported, but in each of these an appropriate disclaimer is provided as a guard against rapid belief in reports of the relationships based on unprotected tests.

In particular, the efforts to cross-validate the factor structure of the 38 open-ended (OE) responses against the 24 equal opportunity perception (EOP) items led to very large numbers of unprotected statistical tests of significance. Emphasis was placed on the <u>pattern</u> of significant outcomes and not on specific significance tests. Nevertheless, the reader is urged to exercise extreme caution whenever hundreds of significance tests are conducted.

V. Statistical treatment of the open-ended responses:

Categories of statistical analyses:

Analysis of the open-ended (OE) responses to the SLEOS consisted of the following six stages:

- Stage 1. reliability of classification system
- Stage 2. frequencies of OE response categories
- Stage 3. factor analyses and creation of scale scores
- Stage 4. cross-validation of OE scale scores
- Stage 5. cross-tabulation of scale scores and demographic variables
- Stage 6. prediction equations for leadership style and MEOCS EOCLIMATE scores

In Stage 1, an assessment of the reliability of the categorization system was made. Only 324 of the 346 SLEOS participants gave responses to at least one of the six open-ended questions; hence the responses of the 324 active response individuals were the data for the present investigation.

In Stage 2, frequencies of each of the response categories across the 324 respondents were examined. Categories containing extremely low frequencies were merged into "other" categories.

In Stage 3, in order to reduce the number of variables to a smaller number, only the responses to questions 96 and questions 98-101 were factor analyzed. Elimination of the responses to question 97 was justified on the basis of the high degree of similarity between items 96 and 97 of the SLEOS. (The SLEOS is reproduced in Appendix A.) Factor analyses were undertaken both with a strict and a lenient criterion for the number of factors to be extracted. Consequently, in the first phase of analysis, the OE and EOP factor analyses were undertaken with a large number of factors for each set of items. Once Phase 1 was completed, OE and EOP solutions based on a small number of factors were considered (Phase 2).

In Stage 4, the validity of the factor-based scale scores was evaluated. At each phase (Phase 1: large number of factors; Phase 2: small number of factors), intercorrelations of factor-based scale scores were examined and the proportion of significant correlation coefficients between item sets was compared to the proportion of significant correlation coefficients within item sets. A rationale for deciding on the number of factor-based scale scores was thus provided. It was concluded that the small number of factors solution clearly received the strongest support from the cross-validation analyses.

Next, in Stage 5, the three scale scores of the OE items and the three scale scores of the EOP items were cross-tabulated with numerous demographic characteristics of individuals participating in the SLEOS, e.g., gender, military vs. civilian, branch of Service. Association between scale variables and demographic categories was evaluated by (alpha-protected) Chi-square tests.

Finally, in Stage 6, regression analyses were used to evaluate the relationship of SLEOS open-ended scale scores and the SLEOS EOP scale scores to two criterion variables, namely, the least-preferred coworker (LPCSCALE) scores and the MEOCS EOCLIMATE scores.

The analyses of each Stage are taken up in the subsections to follow. Brief conclusions will be made within each analysis section and overall implications will be presented in the General Discussion section at the end of the report.

VI. Results

The results of the present report are organized into six major sections (Stages 1-6). At times, briefly stated conclusions will be found within the sections. Other interpretive remarks will be provided in the final section (General Discussion).

Stage 1: Reliability of the classification system

The open-ended response categorization system is reproduced in Appendix B. This scheme was created by the present author based on several draft classification efforts developed by reading through the open-ended responses of several SLEOS classes. Two independent judges (Drs. Larry Hochhaus and Judy Johnson) independently categorized the responses of one Navy class of 30 senior flag officers. The resulting data records were next transposed into a 1710 X 2 matrix where the columns represented the two judges and each successive block of 57 row entries represented the frequencies within the 57 response categories for each of the 30 individual response sheets of the Navy respondents.

The resulting correlation value was .67, a low, but under the circumstances, acceptable level of consistency. Dr. Johnson reported she used the "other" categories sparingly and attempted to make fine discriminations among the written responses. In my own judgments, however, I (LH) tended to use the "other" category whenever ambiguities arose; consequently, our agreement was undoubtedly lower than is possible to achieve.

Based on the correlational analysis, it was concluded that the categories were acceptable without revision. From there, the responses of the remaining 216 SLEOS respondents were classified.

Stage 2: Frequencies of EO response categories

Frequencies within each of the 57 response categories were tallied for the 324 active respondents. Seven categories were underrepresented and in consequent work were merged into the "other" category for that question. Low frequency categories were: AFF_A98, "Strengths - Affirmative Action" (0%); BACK_S97, "Next 10 - Backlash/Smokescreen/Frivolous Complaints" (5.6%); EO_CL97, "Next 10 - EO climate" (4.0%); EO_CLIM, "Today - EO Climate" (3.7%); LEADER97, "Next 10 - Leadership Issues" (2.8%); OPPORT98, "Strengths - Opportunities" (3.7%); and SOCIAL99, "Weaknesses - Social Pressure from Society" (2.5%).

To further reduce the data to a manageable number of open-ended response categories, the responses to question 97 ("What do you believe will be the significant EO issues in the next 10 years?") were eliminated because of their overlap with item 96 ("What do you believe to be the three most significant EO issues facing your Service or agency today?") The resulting frequencies for the remaining 50 categories are shown in Tables 1-5 to follow.

frequency	percent	CODE	descriptive name
84	26	EO_OPP	"Today - opportunities/promotions/retention"
65	20	SEXH	"Today - Sexual harassment"
60	18	BACK_RD	"Today - Reverse discrimination"
57	18	EO_GEN	"Today - EO General"
49	15	RECRU	"Today - Recruiting"
44	14	EO_TR	"Today - EO training"
42	13	DISC_R	"Today - Racial discrimination"
41	13	EO_AA	"Today - EO Affirmative Action"
38	12	WIC_WAS	"Today - Women in combat/women at sea"
31	10	DOWN	"Today - Downsizing/RIF"
25	7	BACK_SS	"Today - Smoke screen/frivolous complaints"
25	7	DISC_G	"Today - Gender discrimination"
24	7	LEADER	"Today - Leadership issues"
171	50	OTHER	"Today - Other"

Table 1: Frequencies of responses in open-ended categories by 324 senior level officers and Senior Executive Service civilians: Item 96. (Frequencies and percents refer to the number/proportion of individuals who made 1, 2, or 3 responses which fit that category.)

Item 98: What are the three greatest strengths of your Service's or agency's programs? frequency percent CODE descriptive name 160 49 LEADER98 "Strengths - Leadership" **79** 24 ED_TR98 "Strengths - Education/training" 73 22 EO_GEN98 "Strengths - EO General" 47 14 CLT98 "Strengths - Climate" 60 18 FAIR C98 "Strengths - Fairness/consistency" 43 18 ORG98 "Strengths - Organization" 32 10 POLICY98 "Strengths - Policy/clear guidelines" 28 9 COMM98 "Strengths - Communication" 168 49 OTHER98 "Strengths - Other"

Table 2: Frequencies of responses in open-ended categories by 324 senior level officers and Senior Executive Service civilians: Item 98. (Frequencies and percents refer to the number/proportion of individuals who made 1, 2, or 3 responses which fit that category.)

frequency	percent	CODE	descriptive name
68	21	EDU_TR99	"Weaknesses - Education/training"
62	19	EO_S99	"Weaknesses - EO Support/need more EO emphasis
52	16	LEADER99	"Weaknesses - Leadership/management"
34	30	EO_CO99	"Weaknesses - EO Concerns/time demands"
33	30	FAIR99	"Weaknesses - Fairness/consistency"
190	57	OTHER99	"Weaknesses - Other"

Table 3: Frequencies of responses in open-ended categories by 324 senior level officers and Senior Executive Service civilians: Item 99. (Frequencies and percents refer to the number/proportion of individuals who made 1, 2, or 3 responses which fit that category.)

frequency	percent	CODE	descriptive name
204	63	LEAD100	"Important elements - Leadership"
138	43	ED_TR100	"Important elements - Training/education"
92	28	FAIR100	"Important elements - Fairness/consistency"
52	16	COMM100	"Important elements - Communications"
42	13	EO100	"Important elements - EO Climate/support"
208	65	OTHER100	"Important elements - Other"

Table 4: Frequencies of responses in open-ended categories by 324 senior level officers and Senior Executive Service civilians: Item 100. (Frequencies and percents refer to the number/proportion of individuals who made 1, 2, or 3 responses which fit that category.)

requency	percent	CODE	descriptive name
37	11	EO_SU101	"Open-ended EO Support"
24	7	EO_CO101	"Open-ended EO Concerns"
68	21*	SPEW	"Number of words on item 101"

Table 5: Frequencies of responses in open-ended categories by 324 senior level officers and Senior Executive Service civilians: Item 101. (Frequencies and percents refer to the number/proportion of individuals who made 1, 2, or 3 responses which fit that category.)

Stage 3: Factor analyses and creation of scale scores

To reduce the 54 open-ended variables to a smaller number, only the responses to questions 96 and questions 98-101 were factor analyzed. Elimination of the responses to question 97 was justified on the basis of the high degree of similarity between items 96 and 97 of the SLEOS. Question 96 asked for the three most significant EO issues facing your Service or agency today, whereas Question 97 asked for the same thing, but for the next 10 years, rather than "today." (The SLEOS is reproduced in Appendix A; the response categories are shown in Appendix B).

The SPSS/PC+ statistical package (Norusis, 1990) was used to factor analyze the reduced set of 38 openended response categories. Because multiple responses may each fit the same response category (especially true for "other" categories), scores within categories ranged from zero to three occurrences. The principal components extraction method was used and eigenvalues exceeding 1.0 were examined. Two discontinuities were perceived, one between the eigenvalues of the second and third factors and another between the eigenvalues of the tenth and eleventh factors. A scree plot (Cattell, 1960) of the eigenvalues of the first 11 factors is roughly sketched in Figure 1.

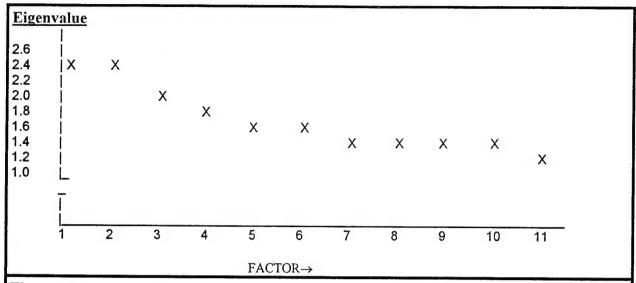


Figure 1. Scree plot of eigenvalues based on a principal components analysis of the 38 open-ended response categories of the SLEOS.

Precise eigenvalues are shown in Table 6 below:

Factor	Eigenvalue	Percent of Variance	Cumulative Percent
1	2.44	6.4	6.4
2	2.40	6.3	12.7
3	1.90	5.0	17.7
4	1.76	4.6	22.4
5	1.65	4.4	26.7
6	1.54	4.1	30.8
7	1.47	3.9	34.7
8	1.41	3.7	38.4
9	1.33	3.5	41.9
10	1.30	3.4	45.3
11	1.23	3.2	48.5
12	1.20	3.1	51.7
13	1.14	3.0	54.7
14	1.12	3.0	57.6
15	1.07	2.8	60.5
16	1.05	2.8	63.2
17	1.02	2.7	65.9

Table 6. Eigenvalues based on a principal components analysis of the 38 open-ended response categories of the SLEOS.

The number of factors to select for rotation cannot easily be determined objectively. Experimental evidence (Tucker, Koopman, & Lynn, 1969) indicates that one should select one more than the number of factors in the scree plot which lie to the left of the perceived breaking point. In the present case, there are two possible discontinuities, namely, between the second and third factors and between the tenth and eleventh factors. This would indicate use of either three or eleven factors, respectively.

In a preliminary analysis, it was decided that each number of factors would be tried (three and eleven). These two analyses were each used to determine scale scores corresponding to their respective Varimax-rotated factor solutions (Norusis, 1990). Next, the resulting scale scores were examined for their correlations with similar factor scale scores based on the 24 equal opportunity perceptions (EOP) items of the SLEOS (Questions 19 through 43).

A scree plot of the first 11 factors of the principal components analysis of the 24 EOP items is shown in Figure 2. Similar to the scree plot of the open-ended items, there are two possible breaks in the scree plot of Figure 2, namely, between the second and third factors and between the fifth and sixth factors. A third possible break can be seen between the seventh and eighth factors, but will not be pursued in the present analysis. Precise eigenvalues are shown in Table 7.

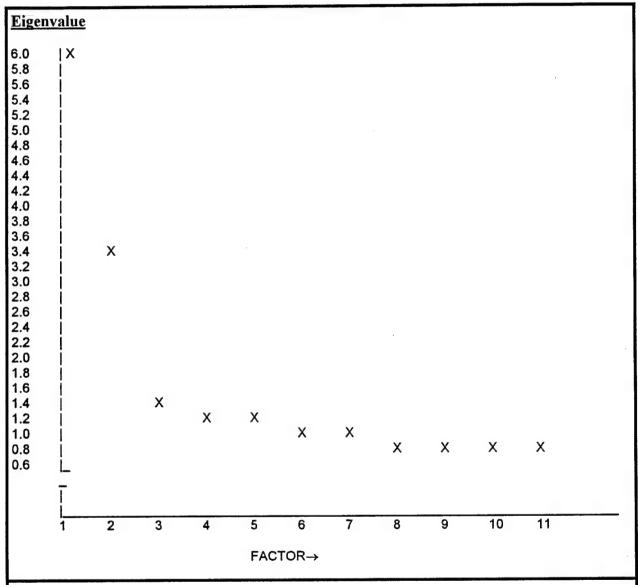


Figure 2. Scree plot of eigenvalues based on a principal components analysis of the 24 equal opportunity perception items of the SLEOS.

Factor	Eigenvalue	Percent of Variance	Cumulative Percent
1	5.93	23.7	23.7
2	3.41	13.6	37.4
3	1.49	6.0	43.3
4	1.28	5.1	48.4
5	1.17	4.7	53.1
6	1.05	4.2	57.3
7	.97	3.9	61.2
8	.87	3.5	64.7
9	.81	3.1	67.9
10	.78	3.0	71.1
11	.75	2.9	74.0
12	.72	2.6	7.9
13	.65	2.5	79.5
14	.63	2.4	82.0

Table 7. Eigenvalues based on a principal components analysis of the 24 equal opportunity perception (EOP) response items of the SLEOS.

Stage 4: Cross-validation of open-ended and equal opportunity perception factors

To summarize the factor analysis results of the 38 open-ended (OE) response categories and the 24 equal opportunity perception (EOP) items, principal components analyses suggested the intercorrelations of the OE and EOP items could each be summarized by either a small number of factors (three OE and three EOP factors) or by a larger set of factors (11 OE factors and 6 EOP factors).

To evaluate the hypothesis that both OE items and EOP items are measuring similar underlying components of equal opportunity viewpoints, OE and EOP scale scores were developed and the intercorrelations both between and within the two sets of scale scores were examined. This was done in two ways. First, a large number of factor-based scale scores (11 OE and 6 EOP scales) were constructed for each set of items. Second, scale scores were constructed by selecting only three factors for each set of items. The former analysis will be summarized only in somewhat general terms because the intercorrelations of factor-based scale scores did not appear to represent a coherent view of the two sets of items. The second analysis will be reported in detail because the resulting intercorrelations of scale scores appear to be more revealing about the general structure of the 38 OE and 24 EOP items. Once the case for a small number of factors is established, the six factor-based OE and EOP scale scores will be related to demographic variables in Stage 5. After that, the usefulness of the six factor-based scale scores in predicting both LPCSCALE (leadership) scores and MEOCS EOCLIMATE scores will be examined in Stage 6.

Many-factor approach: Because interest in the present analyses centered on the ratio of significant to nonsignificant correlation values between sets of scale scores compared to the ratio of significant to nonsignificant correlation values within sets of scale scores, no effort was made to protect the overall alpha level of individual correlation coefficient tests. Protection of experiment-wise alpha levels was undertaken in later analyses of the present report (Stage 5), however. In those analyses, relationships between factor-based scale scores and demographic variables were examined.

When a large number of scale scores (11 OE and 6 EOP scales) was developed and the intercorrelations between and among scale scores were examined for reliability (.01 alpha level), there were 66 possible significance tests of correlation coefficients between the two sets of scale scores, 55 possible tests of correlation coefficients within the eleven OE scale scores, and 15 possible tests of correlation coefficients within the six EOP scale scores.

Significance tests (unprotected for alpha-inflation) revealed five significant Pearson \underline{r} -values between sets of scale scores (out of 66 tests), six significant Pearson \underline{r} -values within the set of OE scale scores (out of 55 tests), and eleven significant Pearson \underline{r} -values within the set of EOP scale scores (out of 15 tests). The significant correlations are listed in Table 8.

Between sets of scale score	s:		
backlash : EOP_importance	15*	(OE scales are on the left, EOP scales are	on the right)
backlash: mission	16*		
leader_eo : mission	.26**		
communication: mission	.13*		
spew : climate	.15*		
Within open-ended scale s	cores:	Within equal opportunity percep	tion scale scores:
backlash : spew	.16*	leader_OE : fairness	.26**
discrimination : OE_education	.13*	eo_support : fairness	.17**
communication : leader_OE	.47**	climate : fairness	.24**
discrimination : recruiting	14*	OE_leader : eo_importance	.25**
affirmative_actn : recruiting	.15*	mission : eo_importance	.24**
downsize : affirmative_actn	.22**	eo_support : eo_importance	.16*
		mission : leader_eo	.29**
		eo_support : leader_eo	.20**
		climate : leader_eo	.25**
* <u>p</u> < .01		eo_support : mission	.24**
** <u>p</u> < .001		climate : eo_support	.20**

Table 8. Significant intercorrelations between and within sets of open-ended (OE) and equal opportunity perception (EOP) factor-based scale scores (large number of factors approach).

Examination of Table 8 reveals a small proportion of significant intercorrelations <u>between</u> OE and EOP sets of scale scores. Five out of 66 possible statistical tests (7%) reach .01 significance in between-set comparisons and 17 out of 70 possible statistical tests (24%) reach .01 significance in within-set comparisons. The data on intercorrelations of factor-based scale scores thus do not support the hypothesis that both OE items and EOP items are measuring similar underlying components of equal opportunity viewpoints. A distinctly different picture emerges, however, when only three OE and three EOP factors are used to summarize the 38 OE items and 24 EOP items. Those data are reported in the next section of this report.

Small number of factors approach: When three OE factors and three EOP factors were selected as a basis for creating scale scores, a pattern of intercorrelations among scale scores emerged which provided fairly strong support for the hypothesis that both OE and EOP items are measuring similar underlying components of equal opportunity viewpoints. It will be argued that this result therefore reinforces the decision to interpret OE and EOP SLEOS responses in terms of these six factor-based scale scores.

Examination of all possible intercorrelations between and among the three OE scale scores and the three EOP scale scores produces nine possible correlation coefficients. There are three possible correlations within the three OE scales and three possible correlation values within the three EOP scales. The significant (unprotected, alpha = .01) values of Pearson <u>r</u>-coefficients are shown in Table 9.

Table 10 shows the full correlation matrix of intercorrelations of the six factor-based scale scores. Values of intercorrelations of each scale score and the MEOCS EOCLIMATE and LPCSCALE (LPC leadership) scores are also included to permit a framework for the Stage 6 analysis to be discussed later (page 34).

Between sets of scale scores: (OE scales	are on the left, EOP scales are on the right)
backlash : EOP_support	21**
backlash : EOP_leader/climate	.17*
education : EOP_support	.18**
education: EOP_leader/climate	.14*
eo_support : EOP_support	.19**
Within OE scale scores: no significant	correlations
Within EOP scale scores:	
EOP_leader/climate : fairness	.22*
$* = \underline{p} < .01$ $** = \underline{p} < .001$	

Table 9. Significant intercorrelations between and within sets of open-ended (OE) and equal opportunity perception (EOP) factor-based scale scores (small number of factors approach).

Correlations:	Vl	V2	V3	V4	V5	V6	V7	V8
VI	1.00							
V2	04	1.00						
V3	.06	.07	1.00					
V4	21**	.18**	.19**	1.00				
V5	08	.08	08	02	1.00			
V6	.17*	.14*	.00	03	.22**	1.00		
V7	.07	03	16*	25**	.30**	.21**	1.00	
V8	.00	.11	05	.00	.03	03	.04	1.00
* = $\mathbf{p} < .01$								
Variable Leger	ıd:							
V1 = BACKLASH	(OE)	V4 =	EOP_SUPP	ORT (EOP)		V7 = ME	OCS EOC	LIMATE
V2 = EDUCATIO	N (OE)	V5 =	FAIRNESS	(EOP)		V8 = LP0	CSCALE	
V3 = EO_SUPPOR	RT (OE)	V6 = E0	OP_LEADE	R/CLIMATI	E (EOP)			
Table 10. Int					i EOP fac	tor-based so	cale scores	and MEOCS

The data of Tables 9 and 10 reveal that five of the nine possible correlation values (56%) between sets of scale scores are significant. In contrast, only one of the six possible correlation values (17%) within sets of scale scores is significant. Discussion of the precise character of the three OE and three EOP factors and the items that went into their respective scale scores will be postponed for a moment, pending interpretation of the overall pattern of scale score intercorrelations. With one exception, discussion of the relationship of MEOCS EOCLIMATE and LPCSCALE (LPC leadership) scores to the scale scores will be postponed until the Stage 6 (regression) analysis is considered.

Tables 9 and 10 indicate strong support for the hypothesis that both OE and EOP items are measuring similar underlying components of equal opportunity viewpoints. This is an important result because it permits interpretation of the OE and EOP factor structures with greater assurance than would be possible by examining either factor analysis alone. The overall picture is one of three OE factors and three EOP factors. Support for the small number of factors approach therefore arises from the observation of a relatively large proportion of significant correlation values between OE and EOP scale scores compared to the low proportion of significant correlation values within either set of three scale scores.

One additional analyses was conducted in the process of exploring the relationship between OE and EOP factor-based scale scores. Namely, the fit between use of three OE scales and six EOP scales was explored. This analysis was suggested by the scree plot of Figure 2 which suggests a possible break between the eigenvalue of factor 5 and the eigenvalue of factor 6. As in the "large number of factors approach," however, the proportion of significant correlation coefficients between sets of scale scores (44%) was again substantially smaller than the proportion of significant correlation coefficients within sets of scale scores (67%).

The identification of relationships between a set of scale scores based on factor analysis of open-ended (OE) SLEOS responses and a set of scale scores based on factor analysis of equal opportunity perception (EOP) items of the SLEOS goes a long way in determining the general structure of responses to two somewhat different aspects of the SLEOS instrument. The discovery of a set of relationships between OE and EOP scale scores provides a unique confirmation of the structure of EO viewpoints which cannot be reached by either analysis alone (cf. Gorsuch, 1983, pp. 350-358). In the present case, the high degree of correlation between more or less independent sets of factor-based scale scores reinforces the view that the 38 open-ended items and the resulting categorized responses to them measure underlying components of equal opportunity viewpoints similar to the factor-based scale scores based on the 24 equal opportunity perception items. Before the interrelationships between scale scores are discussed, however, the scale scores themselves will be examined and an effort will be made to identify and describe the nature of each factor-based scale score.

Structure of the OE and EOP Factor-based Scale Scores: Specific factors and scale scores identified in the present analysis are as follows: The three OE factors were EDUCATION, BACKLASH, and EO_SUPPORT. The three EOP factors were EOP_SUPPORT, FAIRNESS, and EOP_LEADER/CLIMATE. Factor loadings on the three OE factors are shown in Table 11 and factor loadings on the three EOP factors are shown in Table 12. Refer to the open-ended response categorization scheme (Appendix B) and Tables 1-5 for details concerning the OE items. Refer also to the original SLEOS instrument (Appendix A) for the exact wording of the EOP items (items 19-43).

Item	Factor 1	Factor 2	Factor 3
	BACKLASH	EDUCATION	EO_SUPPORT
EO AA	.201	029	105
EO OPP	130	.046	.297
EO TR	242	141	.236
EO_GEN	.145	.046	.071
DISC_R	244	.319	158
BACK_RD	.430	.024	324
BACK SS	.212	.050	220
DISC G	282	.235	194
SEXH	165	.448	342
WIC_WAS	.318	063	028
DOWN	033	051	.104
RECRU	056	168	.449
LEADER	.008	009	.373
OTHER	.025	233	.041
LEADER98	.105	.389	.222
CLT98	.062	.032	.331
COMM98	043	.005	.113
ORG98	111	.058	040
EDU TR98	026	.481	230
POLICY98	026	059	004
FAIR_C98	.000	144	219
EO_GEN98	.204	.203	.295
OTHER98	156	504	077
LEADER99	012	.224	.361
EO_CO99	.527	042	288
EO_S99	051	.139	.357
FAIR99	.164	.014	.004
EDU_TR99	305	.071	.137
OTHER99	305	146	.050
LEAD100	037	.460	.276
ED_TR100	255	.498	.107
COMM100	.019	061	.126
EO100	.208	.214	.221
FAIR100	.222	206	241
OTHER100	068	607	079
EO_SU101	.525	.089	.441
EO_CO101	.475	.055	236
SPEW	.710	.095	.313

Table 11. Factor loadings of 38 open-ended categorization items on each of three OE factors. Items entering the factor-based scale scores are shown in **bold**.

item	Factor 1 EOP_SUPPORT	Factor 2 FAIRNESS	Factor 3 EOP_LEADER/CLIMATE
EOP19	.530	016	028
EOP20	.616	.010	.206
EOP21	.144	.671	.389
EOP22	058	.180	.693
EOP23	118	.092	.654
EOP24	.298	.268	.285
EOP25	.456	.377	.382
EOP26	.536	.229	.256
EOP27	.201	.592	.378
EOP28	134	.352	.282
EOP29	509	066	.164
EOP30	.423	.345	.262
EOP31	.285	.070	.534
EOP32	003	.122	.512
EOP33	.549	.010	014
EOP34	.565	.097	.155
EOP35	.672	095	.083
EOP36	.583	.076	.326
EOP37	.427	.293	.409
EOP38	.589	.119	.365
EOP39	.550	239	.007
EOP40	.087	.676	.317
EOP41	011	.741	.133
EOP42	.059	.807	050
EOP43	016	.825	.009

Table 12. Factor loadings of 24 EOP items on each of three EOP factors. Items entering the factor-based scale scores are shown in **bold**.

Scale scores based on the three OE factors and on the three EOP factors were constructed as simple integer sums or differences of individual items which loaded heavily on each of the respective OE and EOP factors. Selection was based on a fairly easy to define criterion in the case of the EOP scale scores. For EOP scale scores, the four highest-loading items were included in each of the three scale scores. Additionally, the fifth-highest item (EOP21) was added to the factor 2-based scale score because of its high factor loading (.671).

The choice to select a small number of items per scale score was made based on a comparison with the case involving a large number of items (items with loadings above .500 or below -.500). The slight disadvantage in the large number of items approach appeared when intercorrelations of scale scores between- and within-sets of scale scores was used as a criterion.

For the three OE factor-based scale scores, however, the scheme for creating the linear sums was somewhat complex. First, "other" or catch-all categories were excluded regardless of their factor loadings because of the general ambiguity surrounding use of the "other" categories. Second, in an effort to purify OE Factor 1 (BACKLASH), the classification of the open-ended responses to item 101 ("Please make any other comments you would like about EO issues") which were expressions of EO concern (EO_CO101) was added into the BACKLASH scale score and the classifications of the open-ended responses to item 101 which were expressions of EO support (EO_SU101) were included in the EO_SUPPORT scale score.

Other scale score definitions of OE items were also made in a manner designed to both create scale scores which represented a coherent semantic content and to include items with at least moderately high factor loadings (above .35). Because "other" categories were excluded, it turns out that no items with negative factor loadings were included in OE factor-based scale scores. To summarize, the EOP factor-based scale scores seemed to fall naturally into recognizable linear sums while OE scale scores were more multi-interpretable. With that said, the operational definitions of the three OE scale scores and the three EOP scale scores are given in Table 13.

OE scale scores:

BACKLASH = BACK RD + EO_CO99 + EO_CO101 + SPEW

 $EDUCAT = SEXH + ED_TR98 + ED_TR100$

EO SUPPORT = RECRU + LEADER + LEADER99 + EO_S99 + EO_SU101

EOP scale scores:

EOP SUPPORT = EOP35 + EOP36 + EOP38 - EOP20

FAIRNESS = EOP21 + EOP40 + EOP41 + EOP42 + EOP43

EOP_LEADER/CLIMATE = EOP22 + EOP23 + EOP31 + EOP32

Table 13. Composition of three open-ended factor-based scale scores and three equal opportunity perception factor-based scale scores.

The reader is encouraged to refer to Tables 11 and 12 and to Appendixes A and B to achieve a more detailed sense of the meaning of each of the factor-based scale scores. What follows is a brief elaboration of the author's sense of the character of each scale score.

Open-ended Scale Scores

BACKLASH: The BACKLASH scale score appears to reflect direct expressions of concern about problems of reverse discrimination (BACK_RD item) and concern over the EO program in general (EO_CO99 and EO_CO101 items). SPEW is a measure of how many words are added to the final item ("Please make any other comments you would like about EO issues"). BACKLASH may thus additionally connote a tendency toward outspokenness or willingness to express an opinion. Overall, however, the BACKLASH scale score seems to be a measure of upset or anger with current EO practices.

EDUCATION: The EDUCATION scale score is a somewhat complex mixture of support for EO training (ED_TR98 and ED_TR100), expression of concern for leadership as a key point of EO effort within the individual's Service unit or agency (LEAD100), and sexual harassment (SEXH). The multidimensional aspect of the EDUCATION factor is also indicated by the negative loadings of two "other" categories (OTHER98 and OTHER100), although these were not included in the definition of the EDUCATION scale score.

EO_SUPPORT: The EO_SUPPORT scale score also has more than one aspect to it. It includes mention of recruiting (RECRU) as a significant EO issue facing agencies today and includes two items that say leadership is either a significant EO issue facing units or agencies today (LEADER) or that mention leadership as a weakness of one's Service or agency in dealing with EO issues (LEADER99). The two items which reflect statements of support of EO (EO_S99 and EO_SU101) give the scale score its name. It should then be held in mind that those who indicated strong support for EO were also individuals who appeared to be concerned with the overall role of leadership in EO effectiveness.

Equal Opportunity Perception Scale Scores

EOP_SUPPORT: The EOP_SUPPORT factor of the 24 EOP items seems to represent a straightforward assertion of support for EO programs. Items EOP22, EOP23, EOP31, and (reflected) EOP20 comprise the EOP_SUPPORT scale score.

FAIRNESS: The FAIRNESS scale score contains the positive sum of five items, each of which speak to the issue of EO fairness, equitibility, or "Services or agencies doing an excellent job." The FAIRNESS scale score thus also seems to consist of clearly identifiable content.

EOP_LEADER/CLIMATE: The EOP_LEADER/CLIMATE factor appears to consist of two aspects, EO climate and the role of leadership in resolving EO complaints. The EO_LEADER/CLIMATE scale was formed as the sum of items EOP22, EOP23, EOP31, and EOP32. The reader is thus cautioned to keep in mind that "EOP_LEADER/CLIMATE" carries a somewhat dual content.

Relationships between the OE and EOP Factor-based Scale Scores: Detailed examination of the pattern of intercorrelations between and within the two sets of factor-based scale scores (Tables 9 and 10) leads to interesting suggestions concerning the underlying components of equal opportunity viewpoints. Discussion of the significant correlations in Tables 9 and 10 may further help us understand the overall structure of the OE and EOP items.

The EOP_SUPPORT scale score correlates positively with the EO_SUPPORT scale just as would be expected given the similarity of the scale names. The positive association of EOP_SUPPORT and the OE EDUCATION scale and the inverse relationship between EOP_SUPPORT and the OE BACKLASH scale are also sensible given that encouragement of education is a way of showing EO support and that BACKLASH statements represent the antithesis of EO support.

Variable 6 (EOP_LEADER/CLIMATE) corresponds to claims that one's Service or agency has a better EO climate than the private sector or than other governmental agencies, as well as two items that indicate the leader's role in EO climate is important. It is not immediately clear why there is a positive association between Variable 6 and OE BACKLASH and between Variable 6 and OE EDUCATION. Guesses about why these scales are related will be offered, but the reader is advised to maintain a critical attitude concerning these interpretations until they can be independently confirmed.

It is highly speculative, therefore, but the connection between EOP_LEADER/CLIMATE and BACKLASH may reflect a trait of outspokenness on the part of individuals endorsing each set of items. EOP_LEADER/CLIMATE emphasizes the role of leadership and chain of command in EO issues while BACKLASH contains two items which reflect quantity of written comments on the open-ended item 101. It is also a risky guess, but the positive association between EOP_LEADER/CLIMATE and EDUCATION may indicate an overly optimistic attitude about EO climate by those individuals who also endorse an increased emphasis on EO education.

The meaning of the single strong association within the set of three EOP scales (FAIRNESS and EOP_LEADER/CLIMATE, $\underline{r} = .21$, $\underline{p} < .001$) is also difficult to interpret. Because this relationship may simply have been brought about by an imperfect separation of EOP factors, no interpretation of the sense of the relationship will be offered.

The MEOCS EOCLIMATE variable will be dealt with in Stage 6 of this report, but it seems noteworthy that four of the six factor-based scale scores are significantly related to the climate variable (see Table 10). Individuals who believe their EO climate is good also judge their EO system as fair and also indicate interest in the role of leadership in EO issues. The same individuals who believe their EO climate is good are also those least likely to advocate stronger support for EO in general. The relationships between the MEOCS EOCLIMATE scores and the four scale scores (indirect: EO_SUPPORT, EOP_SUPPORT; direct: FAIRNESS, EOP_LEADER/CLIMATE) thus indicate the associations between the OE and EOP sets of scale scores are based on a central or common component which reflects one's perception of the overall EO climate within one's Service or agency.

The pattern of intercorrelations between OE and EOP scale scores also suggests the EOP items of the SLEOS tend to all tap into aspects of EO climate whereas the open-ended responses include additional factors (BACKLASH and EDUCATION) that are not presently a part of the EOP battery. If so, the result may mean that the future addition of items pertaining to BACKLASH (reverse discrimination, frivolous complaints) and EDUCATION (EO training) would increase the range of EO perceptions covered by the SLEOS.

Stage 5: Cross-tabulation of scale scores and demographic variables:

In Stage 5, each of the three OE scale scores (BACKLASH, EDUCATION, and EO_SUPPORT) and each of the three EOP scale scores (EO_SUPPORT, FAIRNESS, and EOP_LEADER/CLIMATE) were cross-tabulated with each of 18 demographic variables (items 1-18) of the SLEOS survey. Demographic items were coded DEM1 to DEM18.

To ensure that the large number of reliability tests (108 chi-square tests) would not lead to spurious declarations of statistical significance, the critical level of alpha (.01) was adjusted by the Bonferonni procedure (Hays, 1981) to yield a new critical alpha of .05/108 = .0005. When this was done, 12 of the 108 possible chi-square tests of association yielded significant values (see Table 14).

Closer examination of the cross-tabulations that yielded significant values revealed a large number of entries with low expected values. These were produced (in many cases) by the use of a large number of subcategories within the factor-based scale scores and within the demographic scales. Because these low frequency category combinations can inflate the observed values of chi-square, the data of each of the 12 significant chi-square analyses were reworked to avoid all cases leading to low expected frequencies. This was accomplished by selectively dropping cases which had led to the creation of low frequency categories.

When the 12 significant cross-tabulation tests were reworked by discarding all cases which led to expected values less than five, all chi-square values showed reduced significance values. None of the previously significant tests remained significant at the alpha = .0005 criterion level. One test, however, yielded a chi-square value which was significant at the traditional (unprotected), alpha = .05, level and two yielded chi-square values that approached traditional reliability (refer to Table 15).

The demographic data therefore indicate no significant relationships between the factor-based scale scores and the 18 demographic classifications (e.g., gender, officer rank, ethnic background, age). The low expected values in the many analyses seem to have inappropriately inflated the observed chi-square values. Nevertheless, the 12 potentially significant outcomes may indicate associations between variables that should be examined in future research with the SLEOS instrument. The <u>suggestive</u> relationships are cataloged in Table 14.

Table 15 displays the three strongest of the chi-square relationships (unadjusted alpha at or near .05). The reader is reminded that the alpha-inflation due to the conduct of 108 chi-square tests of significance is undoubtedly severe. Therefore, please notice that Table 15 portrays the three <u>strongest</u> relationships exhibited among the demographic variables, but that none can be judged to be <u>significant</u> relationships.

Variable Pair:	chi-square	df	p
BACKLASH - DEM8 (my organization)	90.10	40	.00001
BACKLASH - DEM11 (I have filed a complaint)	61.06	24	.00005
EO_SUPPORT - DEM8 (my organization)	194.15	30	.00000
EOP_SUPPORT - DEM10 (I have experienced discrimination; military)	78.67	27	.00000
EOP_SUPPORT - DEM13 (I have experienced discrimination; nonmilitary)	y) 78.80	36	.00005
EOP_SUPPORT - DEM16 (education level)	190.97	45	.00000
FAIRNESS - DEM2 (racial/ethnic group)	62.30	27	.00013
FAIRNESS - DEM4 (officer pay grade)	96.47	54	.00034
FAIRNESS - DEM5 (SES pay grade)	126.09	54	.00000
FAIRNESS - DEM6 (age)	103.39	45	.00000
FAIRNESS - DEM7 (my military branch)	199.52	45	.00000
FAIRNESS - DEM15 (I was satisfied with the disposition of my complaint)	85.69	36	.00001

Table 14. Twelve chi-square tests of association between OE and EOP factor-based scale scores and demographic variables. Caution is urged that significance levels are likely to be inflated due to extremely low values of expected frequency throughout each of these tests.

racial/ethnic group: minority	d Racial/Ethnic Category	d Racia	Fairness a	Association 1:
minority 4 1 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 8 9 10	7	6	Fairness rating:
white 19 24 88 22 14 modified chi-square (4 df) = 9.47, p = .05044 Association 2: Fairness and Military vs. Civilian Status Fairness rating: 6 7 8 9 1 status: civilian 8 9 21 1 3 3			:	racial/ethnic group
modified chi-square (4 df) = 9.47, $p = .05044$ Association 2: Fairness and Military vs. Civilian Status: Fairness rating: 6 7 8 9 1 1 3 military 15 10 70 22 10 modified chi-square (4 df) = 8.36, $p = .07926$ Association 3: Fairness and Age Fairness rating: 6 7 8 9 1 age: 41-45 6 2 6 1 46-50 5 12 46 12 51-55 7 9 25 8 556-60 4 1 12 2 modified chi-square (12 df) = 25.69, $p = .01188$	1 3 1 5	1	4	minority
Association 2: Fairness and Military vs. Civilian Status Fairness rating: 6 7 8 9 1 status: civilian 8 9 21 1 3 3	24 88 22 140	24	19	white
Fairness rating: 6 7 8 9 1 status: civilian 8 9 21 1 3 3 military 15 10 70 22 10 modified chi-square (4 df) = 8.36, p = .07926 Association 3: Fairness and Age Fairness rating: 6 7 8 9 1 age: 41-45 6 2 6 1 46-50 5 12 46 12 7 51-55 7 9 25 8 55-660 4 1 12 2 modified chi-square (12 df) = 25.69, p = .01188	p = .05044	p = .050	e (4 df) = 9.4	modified chi-square
status: civilian	d Military vs. Civilian Status	d Milit	Fairness :	Association 2:
civilian 8 9 21 1 3 3 military 15 10 70 22 10 10 10 10 10 10 10 10 10 10 10 10 10	7 8 9 10	7	6	Fairness rating:
military 15 10 70 22 10 modified chi-square (4 df) = 8.36, p = .07926 Association 3: Fairness and Age Fairness rating: 6 7 8 9 10 age: 41-45 6 2 6 1 46-50 5 12 46 12 76 51-55 7 9 25 8 55-660 4 1 12 2 modified chi-square (12 df) = 25.69, p = .01188				status:
modified chi-square (4 df) = 8.36, p = .07926 Association 3: Fairness and Age Fairness rating: 6 7 8 9 1 age: 41-45 6 2 6 1 46-50 5 12 46 12 7 51-55 7 9 25 8 5 56-60 4 1 12 2 modified chi-square (12 df) = 25.69, p = .01188	9 21 1 39	9	8	civilian
Association 3: Fairness and Age Fairness rating: 6 7 8 9 1 age: 41-45 6 2 6 1 46-50 5 12 46 12 5 51-55 7 9 25 8 5 56-60 4 1 12 2 modified chi-square (12 df) = 25.69, p = .01188	10 70 22 106	10	15	military
Fairness rating: 6 7 8 9 1 age: $\begin{array}{cccccccccccccccccccccccccccccccccccc$	p = .07926	, <u>p</u> = .079	e (4 df) = 8.3	modified chi-square
age: 41-45 46-50 5 12 46 12 51-55 7 9 25 56-60 4 1 12 2 modified chi-square (12 df) = 25.69, p = .01188	d Age	d Age	Fairness :	Association 3:
41-45 6 2 6 1 46-50 5 12 46 12 7 51-55 7 9 25 8 5 56-60 4 1 12 2 modified chi-square (12 df) = 25.69, $p = .01188$	7 8 9 10	7	6	Fairness rating:
46-50 5 12 46 12 7 51-55 7 9 25 8 5 56-60 4 1 12 2 modified chi-square (12 df) = 25.69, $p = .01188$				age:
$51-55$ 7 9 25 8 $55-660$ 4 1 12 2 modified chi-square (12 df) = 25.69, \underline{p} = .01188			_	41-45
56-60 4 1 12 2 modified chi-square (12 df) = 25.69, \underline{p} = .01188		12	5	46-50
modified chi-square (12 df) = 25.69, $p = .01188$	9 25 8 57	9	7	51-55
	1 12 2 7	1	4	56-60
	59, p = .01188	69, p = .0	e(12 df) = 2	modified chi-squar
able 15. Three suggestive associations of factor-based scale s	ociations of factor-based scale scores	sociations	suggestive	ble 15. Three

The three suggestive associations of variables portrayed in Table 15 invite interpretation in spite of their uncertain status as replicable relationships. In the first detailed association of variables, the nonwhite group's fairness ratings are distributed approximately evenly across the selected fairness rating categories whereas 140 out of 293 of the fairness ratings by whites fall in the highest possible fairness scale score. If this trend were to exhibit reliability in future research, it would indicate whites perceive the present EO program as much more fair than nonwhites.

The differences suggested in Association 2 of Table 15 indicate military individuals judge the EO activities of their Service as highly fair relative to the view of civilians concerning their own agencies. This datum, were it to be demonstrated again in future research, is consistent with the popular image of military units as ranking very high in the fairness of their EO programs.

The third suggestive relationship in Table 15 indicates an "inverted U-shaped function" describing the association between fairness ratings and age. Mid-range individuals (ages 46-55) appear to see the current system as much more fair than do either the youngest (ages 41-45) or the oldest (ages 56-60) respondents. Possibly this reflects a comfort level for those who have established a place within the system coupled with a degree of disaffection in those who are still working to achieve a place in the system or in those who are about to leave it. A clearer picture of this possible relationship between age and sense of EO fairness will have to await future research.

To summarize, examination of relationships between scale scores and demographic variables revealed a number of possible trends that may be a guide to future research. The EOP FAIRNESS scale score produced the three strongest (but possibly statistically unreliable) degrees of association with demographic variables. Suggestive differences in FAIRNESS scale scores were detected between minority vs. white racial/ethnic groups, between military vs. civilian groups, and between four age groups.

Stage 6: Prediction equations for leadership style and EOCLIMATE climate scores:

Two particular research interests which motivated the SLEOS instrument concerned a short-form version of a scale of leadership style, the LPC measure of Fiedler (1967), and a scale of perceived EO climate based on the simple sum of two SLEOS items (items 60 and 61) which had been imported from the MEOCS instrument. The two criterion variables to be explored will be referred to as LPCSCALE and EOCLIMATE. Each measure is briefly described and next the regression analyses will be presented.

LPCSCALE is the sum of items 84 through 95 of the SLEOS (after half of the items are reversed to make the high end of the scale positive). LPCSCALE represents ratings by each respondent of his or her <u>least-preferred coworker</u>. High scores indicate a positive view of one's least desirable colleague suggesting individuals with who are particularly considerate and who are concerned with maintaining harmonious relationships. Conversely, low LPCSCALE scores suggest individuals who are more concerned with the task environment than with interpersonal relationships (see Statt, 1994, for a recent review).

Fiedler claims work situations which permit the highest degree of leader control are those with three characteristics:

- 1) situations in which the leader has the work group's trust and support,
- 2) situations in which the task structure is clearly defined,

and

3) situations in which the leader has the power to enforce compliance of group members.

According to Fiedler, the task-oriented leader (low LPCSCALE scores) has a leadership advantage at either extreme, that is, either in an context favoring high control (good relations with group members, a very structured task, and high position power) or in the opposite (poor relations with group members, a very unstructured task, and low position power).

Research on Fiedler's LPC theory has yielded mixed results. Criticisms concern the reliability and validity of the LPC measure and question the assumption that it measures a stable personality trait. Support centers on its ability to predict well in laboratory situations (Statt, 1994).

EOCLIMATE was included in the SLEOS to permit a direct comparison of the responses of general and flag officers and Senior Executive Service respondents with answers given to the identical items by over 300,000 military personnel. The two items (items 60 and 61) simply ask for two ratings of EO climate on a five-point scale (impression of group perceptions plus individual perception).

The EOCLIMATE score has already been discussed (p. 21) in terms of its strong relationship to four of the six factor-based scale scores (EO_SUPPORT, EOP_SUPPORT, FAIRNESS, and EOP_LEADER/CLIMATE). The fact that a highly significant prediction equation can be developed relating EOCLIMATE to the six factor-based OE and EOP scale scores will not be surprising.

LPCSCALE Predictions:

A STEPWISE regression analysis (Norusis, 1990) was applied to the Fiedler LPCSCALE scores as the dependent variable and the three OE and three EOP factor-based scale scores as independent variables. The analysis selected only the OE EDUCATION scale score as statistically significant in the prediction of LPC, $\underline{F}(1, 322) = 3.94$, $\underline{p} = .0481$.

The resulting prediction equation was:

The standard errors of the regression constants were .063 (intercept) and .031 (slope).

As noted, the EDUCATION scale score is a complicated mixture of variables pertaining to sexual harassment, EO education emphasis, and concern for the role of leadership in EO success. For this reason, the four unit variables which make up the EDUCATION scale score (SEXH, ED_TR98, ED_TR100, and LEAD100) were applied in a second attempt to predict LPCSCALE scores via regression analysis. It was hypothesized (a priori) that only the LEAD100 score would be significantly related to LPCSCALE scores. That assessment was based on the belief that respondents scoring low on the LPCSCALE would be those individuals who believed leadership played a key role in EO successes.

The prediction that LPCSCALE scores would be predicted by LEAD100 (indication that leadership is important in an effective EO program) was not supported. The correlation matrix of the four EDUCATION variables and the LPCSCALE variable is shown in Table 16.

Correlations:	LPCSCALE	SEXH	EDU_TR98	ED_TR100
SEXH	.008		****	
EDU_TR98	.084	.252**		
ED_TR100	.119	.212**	.267**	
LEAD100	.042	.042	.087	.060
**	100. > q = 3			

Table 16. Intercorrelations between each of the four variables which make up the EDUCATION scale score and the LPCSCALE variable.

STEPWISE regression analysis based on Fiedler's LPCSCALE as the dependent variable and the four component scores of the EDUCATION scale score as independent variables yielded one significant independent variable. The analysis selected ED_TR100 (selection of EO training as one of the "three most important elements of an effective EO program") as statistically significant in the prediction of LPC, $\underline{F}(1, 322) = 4.60$, $\underline{p} = .0328$.

The resulting prediction equation was:

$$LPCSCALE = 2.90 + .12 ED TR100$$

The standard errors of the regression constants were .066 (intercept) and .049 (slope).

EOCLIMATE Predictions:

When a STEPWISE regression analysis was applied to the task of developing a prediction equation for the MEOCS EOCLIMATE scores, three of the six factor-based scale scores (the three EOP scales) were selected as significant in predicting climate scores. As one would expect based on the correlations shown in Table 10, the FAIRNESS scale score was the strongest predictor of EOCLIMATE, whereas EOP_SUPPORT and EOP_LEADER/CLIMATE were selected second and third, respectively, by the STEPWISE analysis.

The resulting prediction equation was:

With three variables entered in the prediction equation, the overall regression equation was highly significant, $\underline{F}(3, 320) = 21.54$, $\underline{p} = .0000$. Standard errors of the intercept and Beta weights were: .486 (intercept), .045 (FAIRNESS), .042 (EOP_SUPPORT, and .046 (EOP_LEADER/CLIMATE).

It is interesting that when all scale score variables are used in a single effort to predict EOCLIMATE the factor-based score of EOP_SUPPORT bears a negative loading. It is understandable that the same individuals who perceive a negative EO climate (based on the two MEOCS climate items of the SLEOS) also perceive a need for additional EO training. Thus the inverse relationship between EOCLIMATE and EOP_SUPPORT ($\underline{r} = -.25$, $\underline{p} < .001$) represents a validation of the brief EOCLIMATE scale.

VI. General Discussion:

The primary implication of the present results is that the data support the view that the open-ended responses to the SLEOS do indeed tap into unique aspects of equal opportunity viewpoints. Strongest among these unique components are the factors of BACKLASH and EDUCATION. Apparently, respondents used the open-ended questions to express concerns about backlash issues, such as reverse discrimination and use of equal opportunity challenges to avoid discipline ("smoke screening"). Correlational analyses and cross-validated factor analyses indicate the EDUCATION factor-based scale score also measures an equal opportunity viewpoint which is not communicated in the standard equal opportunity perception (EOP) items. The EDUCATION scale score is much less easy to characterize than the BACKLASH score, however, because it consists of a disparate set of contributing variables (sexual harassment, support of EO training, and belief in the importance of leadership in EO effectiveness). To repeat, the two factor-based scale scores which appear to be unique and outside the four climate-related scale scores are the BACKLASH and EDUCATION scales of the open-ended factor set. BACKLASH and EDUCATION appear to represent unique EO perceptions not reflected in the standard items.

Use of the term "reverse discrimination" requires elaboration because many contemporary writers believe it is an angry, pejorative term reflecting the feelings by the dominant subpopulation that they have been cheated (Aguirre & Turner, 1995; Jaret, 1995; Schaeffer, 1995). It is not the place of the present report to determine if perceptions of reverse discrimination have validity or are merely buzzwords designed to perpetuate inequalities. It is important, however, to acknowledge that the mere expression of concerns about reverse discrimination by 18%

of a group which is 90% white does <u>not</u> mean the dominant subculture has experienced unequal access to promotions or valued resources. Perhaps the strongest statement that can be made is that 60 individuals in a group of 324 officers and Senior Executive Service members felt strongly enough about reverse discrimination to list it as one of the significant issues facing their Service or agency today.

When the relationship of the EOCLIMATE score to the three OE factor-based scale scores and to the three EOP factor-based scale scores was examined, a coherent picture of the entire set of items emerged. That view is that the 24 EOP items all strongly relate to an overall sense of quality of EO climate. Both the EO_SUPPORT scale score of the OE factor set and the EOP_SUPPORT scale score of the EOP factor set are inversely related to the climate component. The data thus indicate a link between perception of EO climate and willingness to recommend EO training.

One scale score (EDUCATION) provided a hint of relationship to the LPC ("least-preferred coworker") leadership style variable, but the significance level was marginal given the stepwise regression analysis selected the best fitting variable from among a set of six scores. When component scores of the EDUCATION scale score were used to predict LPC scores, the EO TRAINING measure produced the strongest, but again marginal (r = .12), relationship.

VII. Recommendations:

Two strong recommendations are offered based on the present analysis of open-ended and equal opportunity perception responses to the SLEOS instrument. First, it is recommended that specific EOP (equal opportunity perception) items be added to the SLEOS to expand respondents' ability to express views which are only briefly tapped by the present standard question set. Areas for expansion should include the following topics:

- 1. perception of reverse discrimination
- 2. perception of "smoke screening" (frivolous complaints; discipline avoidance)
- 3. perception of problems dealing with sexual harassment

and

4. perception of the importance of leadership to EO effectiveness

The second recommendation is to seek a replacement for the Fiedler LPC measure. While it is worthwhile to explore the relationship between leadership style and EO perceptions, no strong relationships have been uncovered between the LPCSCALE measure and any of the six possible factors represented in either the 24 EOP (equal opportunity perception) items or the 38 OE (open-ended) response categories. Possibly the assumption that stable leadership traits can be uncovered is the source of difficulty in use of the LPC measure. Leadership qualities may be much more specific to situations (e.g., Vroom & Yetton, 1974) complicating its measurement and preventing its use within the SLEOS instrument.

Arguments in favor of keeping the Fiedler LPC measure include the present lack of a suitable alternative. Added advantages include its brevity and the opacity with which its purposes are apparent in the content of its items.

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SENIOR LEADER EQUAL OPPORTUNITY SURVEY

VERSION 1.0

PRIVACY ACT STATEMENT

In accordance with DoD Directive 5400.11, the following information about this survey is provided:

- a. Authority: 10 USC, 131.
- b. Principal Purpose: The survey is being conducted to gain insight into equal opportunity and human relations from a senior leader perspective.
- c. Routine Uses: Information provided by respondents will be treated confidentially. The averaged data will be provided to participants in senior leader equal opportunity education and training to help participants understand peer and personal views of equal opportunity in the military. Individual results will be provided confidentially to the respondent. Responses will be added to a database of results from all senior leaders surveyed. Averaged results from the database will be used to inform senior leaders about equal opportunity issues.
- d. Participation: Response to this survey is voluntary. Failure to participate will lessen your ability to participate fully in your equal opportunity course, reduce reliability of the feedback provided to other participants in your course, and may hamper efforts by DoD to track trends in equal opportunity and organizational issues. Your response is needed to help ensure the validity of the survey and enhance your training. We appreciate your participation.

This survey was constructed by the Defense Equal Opportunity Management Institute, 740 O'Malley Road, Patrick Air Force Base, FL. 32925-3399. For further information, contact the Directorate of Research, Defense Equal Opportunity Management Institute

SENIOR LEADER EQUAL OPPORTUNITY SURVEY

General Instructions (Please read before beginning the survey)

This survey is administered as part your equal opportunity (EO) course. It measures your views of equal opportunity climate in your Service or agency. We will use the information to provide confidential feedback to you regarding how your views and those of your peers compare. The survey results will be discussed in your course to help you understand EO issues in the military.

You will be asked for your opinion on a number of issues. Your individual responses will be held confidential, though your class averages will be presented as part of your training. The individual items of the survey are used to construct scales measuring various aspects of EO and human relations. The scales were developed using a standard measurement technique called factor analysis, and the scales are much more reliable than individual items as a measurement device. To maintain the integrity of the scales, it is important that you respond to as many items as possible. If you absolutely cannot respond to an item, just leave it blank.

For the purposes of this survey, we follow standard DoD definitions (based on Census categories) . . .

"Minority" includes males or females of the following racial/ethnic groups:

- BLACK/AFRICAN-AMERICAN (NOT OF HISPANIC ORIGIN)
- HISPANIC
- ASIAN-AMERICAN OR PACIFIC ISLANDERS
- NATIVE AMERICAN/ALASKAN NATIVE
- OTHER MINORITY (includes racial/ethnic groups not listed above, yet not considered part of the white or Caucasian majority in the United States)

"Majority" includes white (or Caucasian) males and females not in the groups listed above.

"Unit" or "organization" refers to the command, directorate, division, branch, or organizational unit you identify as being "your unit." This will usually be an organization of 100 people or more. You might think of it as your answer to the question, "What outfit are you with?" (e.g., "I'm with the Third Brigade," or "I'm in the Transportation Division"). For purposes of this survey, if what you think of as your "unit" is much smaller than 100 people, consider the next higher organizational level (with 100 people or more) as your unit.

Please . . .

- WRITE YOUR ADMIN NUMBER IN THE SPACE PROVIDED AT THE TOP OF THE RESPONSE SHEET
 - USE A #2 PENCIL TO ANSWER EACH ITEM ON THE RESPONSE SHEET
- TRY TO BE AS ACCURATE AS YOU CAN, BUT FOR MOST OF THE ITEMS WE ARE ASKING FOR YOUR OPINIONS AND THERE ARE NO RIGHT OR WRONG ANSWERS
- AFTER COMPLETING THE QUESTIONNAIRE, SEAL IT AND YOUR ANSWER SHEET IN THE ENVELOPE PROVIDED. PLEASE DO NOT FOLD THE RESPONSE SHEET. RETURN THE SEALED ENVELOPE TO:

DEOMI/DR
DIRECTORATE OF RESEARCH
ATTN: DR. DANSBY
740 O'MALLEY ROAD
PATRICK AFB FL 32925-3399

PART I Demographics

In this section, please tell us some things about yourself. This information will be used for statistical analysis. Your responses will be held confidential.

- 1. I am
 - 1 = female 2 = male
- 2. My racial/ethnic group is
 - 1 = American Indian or Alaskan Native
 - 2 = Asian or Pacific Islander
 - 3 = African-American (not of Hispanic origin)
 - 4 = Hispanic
 - 5 = White (not of Hispanic origin)
 - 6 = Other
- 3. I am a(n):
- 1 = officer
- 2 = Federal civilian (DoD affiliated)
- 3 = Federal civilian (not DoD affiliated)
- 4 = other
- 4. If commissioned officer, what pay grade?
 - 1 = O6 (O7 Selectee)
 - 2 = 07
 - 3 = 08
 - 4 = 09
 - 5 = 010
 - 6 = not a military officer
- 5. If SES civilian employee, what grade?
 - I = SES 1
 - 2 = SES 2
 - 3 = SES 3
 - 4 = SES 4
 - 5 = SES 5 or higher
 - 6 = not an SES civilian
- 6. My age is
 - 1 = under 40 years
 - 2 = 41 45
 - 3 = 46 50

- 4 = 51 55
- 5 = 56 60
- 6 = 61 or over
- 7. My military or civilian appointment is with
 - 1 = Air Force
 - 2 = Army
 - 3 = Navy
 - 4 = Marine Corps
 - 5 = Coast Guard
 - 6 = Other Federal Civil Service
- 8. My organization is best described as:
 - 1 = active duty military
 - 2 = Reserve
 - 3 = National Guard
 - 4 = DoD Federal Civilian
 - 5 = Non-DoD Federal Civilian
 - 6 = other
- 9. If you are a member of the National Guard or Reserve, how would you classify your duty?
 - 1 = Primarily weekends and annual training
 - 2 = Individual Mobilization Augmentee
 - 3 = Technician
 - 4 = Active Guard/Reserve
 - 5 = Other Guard or Reserve employee
 - 6 = I am not a Guard or Reserve member
- 10. I have personally experienced an incident of discrimination (racial, sexual, or sexual harassment) directed at me from *military* sources (including civilians employed by the military).
 - 1 = YES 2 = NO (mark 6 "N/A" on items 11-12 and go to item 13)
- 11. I filed a complaint on the incident.
- 1 = YES 2 = NO 6 = N/A
- I was satisfied with the disposition of the complaint that I filed.
- 1 = YES 2 = NO 6 = N/A

- 13. I have personally experienced an incident of discrimination (racial, sexual, or sexual harassment) from *non-military* sources.
 - 1 = YES 2 = NO (mark 6 "N/A" on items 14-15 and go to item 16)
- 14. I filed a complaint on the incident.
- 1 = YES 2 = NO 6 = N/A
- 15. I was satisfied with the disposition of the complaint that I filed.
 - 1 = YES 2 = NO 6 = N/A
- 16. The highest level of education I have completed is:
 - 1 = high school graduate or G.E.D.
 - 2 = some college
 - 3 = associate's degree or equivalent
 - 4 = bachelor's degree or equivalent
 - 5 = master's degree or equivalent
 - 6 = doctor's degree or equivalent
- 17. Before I joined the military (or started working for the government), the approximate percentage of my close personal friends who were of my same racial/ethnic group was
 - 1 = 25 percent or less
 - 2 = more than 25 but less than 50 percent
 - 3 = at least 50 but less than 75 percent
 - 4 = at least 75 but less than 100 percent
 - 5 = 100 percent
- 18. Currently, I have at least one close personal friend (a person with whom I would feel comfortable discussing very personal problems) who is of a different racial/ethnic group than myself.

$$1 = YES$$
 $2 = NO$

PART II General EO Perceptions

Use the scale below to indicate your degree of agreement with the following statements.

- 1 = totally disagree with the statement
- 2 = moderately disagree with the statement
- 3 = neither agree nor disagree with the statement
- 4 = moderately agree with the statement
- 5 = totally agree with the statement
- 19. EO plays a critical part in readiness.
- 20. The EO program in my Service or agency has served its purpose and should be eliminated.
- 21. Overall, my Service or agency does an excellent job of providing EO to all members.
- 22. The EO climate in my Service or agency is much better than it is in the private sector.
- 23. The EO climate in my Service or agency is much better than it is in other (non-federal) government agencies.
- 24. I fully understand the goals of the EO programs within my Service or agency.
- 25. I fully support the EO program in my Service or agency.
- 26. There is a strong link between EO in an organization and getting the job done.
- 27. The EO program in my Service or Agency is highly effective.
- 28. I have received sufficient EO training in my career.
- 29. Most leaders in my Service or agency place too much emphasis on EO issues.
- EO training in my Service or agency is generally helpful in improving intergroup relations.

- 1 = totally disagree with the statement
- 2 = moderately disagree with the statement
- 3 = neither agree nor disagree with the statement
- 4 = moderately agree with the statement
- 5 = totally agree with the statement
- 31. The most important element in a good EO climate is the commander's or agency head's leadership.
- 32. EO issues should be handled through the chain-of-command.
- 33. There is a need for a "safety valve" outside the chain-of-command to resolve some EO complaints.
- 34. EO climate assessment is an important tool in resolving EO issues or improving the EO climate.
- 35. Affirmative action is an important element of an EO program.
- 36. EO education or training is an important element in an EO program.
- 37. It is extremely important for the organizational commander or head to model appropriate EO behaviors.
- 38. Everyone should be involved in promoting EO within my Service or agency.
- 39. My Service or agency should expand its EO programs.
- 40. EO issues are generally handled equitably in my Service or agency.
- 41. The discipline system in my Service or agency is fair to all groups.
- 42. The promotion system in my Service or agency is fair to all groups.
- 43. The assignment system in my Service or agency is fair to all groups.

PART III EO Issues

For each of the following, indicate the degree to which you believe it is a problem within your Service or agency. Use the scale below.

- 1 = a very serious problem
- 2 = a serious problem
- 3 = a moderate problem
- 4 = a minor problem
- 5 = no problem at all

The relationship between . . .

- 44. Black (African-American) and white members
- 45. Hispanic and white members
- 46. Asian-Pacific and white members
- 47. Native American and white members
- 48. Minority and majority members in general
- 49. Minority groups and other minority groups (e.g., black and Hispanic or Asian-Pacific and Native American)
- 50. Women and men
- 51. Minority women and minority men
- 52. Minority women and majority men
- 53. Majority women and minority men
- 54. Majority women and majority men

Concerns with . . .

- 55. Racism or race discrimination
- 56. Sexism or gender discrimination
- 57. Sexual harassment
- 58. Preferential treatment for women
- 59. Preferential treatment for minority members

PART IV Unit EO Climate

For Part IV of the survey, think about the unit you are currently assigned to. If your current unit is not part of your Service or agency, or if you haven't been with the unit for two months, think about the last unit to which you were assigned in your Service or agency. Rate each item based on your perception of conditions in that unit.

- 60. Most people would rate the equal opportunity climate in my unit as
 - 1 = very poor
 - 2 = poor
 - 3 = about average
 - 4 = good
 - 5 = very good
- 61. I personally would rate the equal opportunity climate in my unit as
 - 1 = very poor
 - 2 = poor
 - 3 = about average
 - 4 = good
 - 5 = very good

For the next series of items, use the scale below to indicate your opinion of the likelihood that the listed actions occurred in your unit in the last 30 days for which you were part of the unit. We are not asking whether you have actually observed the actions; rather, we would like your opinion as to how likely such actions are to have taken place. To make these judgments, we will ask you to use the following scale:

- 1 = There is a very high chance that the action occurred
- 2 = There is a reasonably high chance that the action occurred.
- 3 = There is a *moderate chance* that the action occurred.
- 4 = There is a *small chance* that the action occurred.
- 5 = There is almost no chance that the action occurred.

EXAMPLE: IF, IN YOUR OPINION, THERE IS A VERY HIGH CHANCE THAT "A MALE GAVE A 'WOLF WHISTLE' TO A FEMALE," YOU WOULD ASSIGN A "1" TO THAT ACTION.

- 62. A male supervisor touched a female peer in friendly manner, but never touched male peers.
- 63. When a woman complained of sexual harassment to her superior, he told her, "You're being too sensitive."
- 64. A supervisor referred to women subordinates by their first names in public while using titles for the male subordinates.
- 65. The person in charge assigned an attractive female to escort visiting male officials because, "We need someone nice looking to show them around."
- 66. A majority supervisor frequently reprimanded a minority employee but rarely reprimanded a majority employee who had the same level of performance.
- 67. A majority supervisor did not select a qualified minority subordinate for promotion but did select qualified majority members.
- 68. A minority person was assigned less desirable office space than a majority person.
- 69. The person in charge changed the duty assignments when it was discovered that two persons of the same minority were assigned to the same sensitive area on the same shift.
- 70. While giving a lecture, the person in charge of the organization took more time to answer questions from majority members than from minority members.
- 71. Majority and minority supervisors were seen having lunch together.
- 72. Majority and minority personnel were seen having lunch together.
- 73. A new minority person joined the organization and quickly developed close majority friends within the organization.

- 1 = There is a very high chance that the action occurred.
- 2 = There is a reasonably high chance that the action occurred.
- 3 = There is a *moderate chance* that the action occurred.
- 4 = There is a *small chance* that the action occurred.
- 5 = There is almost no chance that the action occurred.
- 74. Majority and minority members were seen socializing together.
- 75. Majority personnel joined minority friends at the same table in the cafeteria or designated eating area.
- 76. A majority person told several jokes about minorities.
- 77. Graffiti written on the organization's rest room or latrine walls "put down" minorities or women.
- 78. Offensive racial/ethnic names were frequently heard.
- 79. Racial/ethnic jokes were frequently heard.
- 80. The person in charge did not appoint a qualified majority person to a key position, but instead appointed a less qualified minority person.
- 81. A minority man was selected for a prestigious assignment over a majority man who was equally, if not slightly better, qualified.
- 82. A minority woman was selected to receive an award for an outstanding act, even though she was not perceived by her peers as being as qualified as her nearest competitor, a majority man.
- 83. A majority and a minority person each turned in similar pieces of equipment with similar problems. The minority person was given a new issue; the majority person's equipment was sent to maintenance for repairs.

PART V LPC Scale

In this part, we are interested in your personal experiences in the work environment. We would like you to think of the person, regardless of race or gender, with whom you worked least well during your years with your Service or agency. This person may be someone you work with now or someone you knew in the past. Use the following scales to indicate the degree to which you would describe that person as...

	123456	
84. Rejecting		Accepting
85. Pleasant		Unpleasant
86. Unenthus- iastic		Enthusiastic
87. Friendly		Unfriendly
88. Distant		Close
89. Cold		Warm
90. Cooperative		Uncooperative
91. Self-assured		Hesitant
92. Efficient		Inefficient
93. Open		Guarded
94. Boring		Interesting
95. Gloomy		Cheerful

PART VI Open-ended Questions

In this part, we'd like your opinions on a variety of EO issues. Please write your responses in the space provided.

96. What do you believe to be the three most significant EO issues facing your Service or agency today? (Please list them in order of significance, with 1 as the most significant.)

1.

2.

3.

97. What do you believe to be the three most significant EO issues facing your Service or agency within the next 10 years? (Please list them in order of significance, with 1 as the most significant.)

1.

2.

3.

98. What are the three greatest strengths of your Service's or agency's EO programs? (Please list them in order of strength, with 1 as the greatest strength.)

1.

2.

3.

99. What are the three greatest weaknesses of your Service's or agency's EO programs? (Please list them in order of weakness, with 1 as the greatest weakest.)

1.

2.

3.

100. What are the three most important elements of an effective EO program? (Please list them in order of importance, with 1 as the most important.)

1.

2.

3.

101. Please make any other comments you would like about EO issues.

Appendix B: SLS Categorization Scheme

Below is the revised form of categories for the Senior Leadership Survey (SLS). **CAUTION:** To enhance reliability, if you are unsure of how to classify a particular response, enter it as "OTHER."

Item 96: What do you believe to be the three most significant EO issues facing your Service or agency today? (Please list them in the order of significance, with 1 as the most significant.)

EQUAL OPPORTUNITY BEHAVIORS

109	EO-AA	affirmative action
107	LIO-IMI	dillimite to detion

110 EO-CLIM climate

111 EO-OPP opportunities/promotions

112 EO-TR training

113 EO-GEN general, policy, goals, other

RACIAL ISSUES - DISCRIMINATION AND BACKLASH

114 DISC-R racial discrimination (but not, e.g., "race relations")

115 BACK-RD backlash-reverse discrimination

116 BACK-SS backlash-smoke screens/frivolous complaints

GENDER ISSUES

117 DISC-G discrimination-gender

118 SEXH sexual harassment

119 WIC/WAS women in combat/women at sea

OTHER

120 DOWN downsizing adjustments

121 RECRU recruitment

122 LEADER leadership issues

123 OTHER mention of any other: e.g., communication, quotas, fraternization, gays

Item 97. What do you believe to be the three most significant EO issues facing your Service or agency within the next 10 years? (Please list them in order of significance, with 1 as the most significant.)

EQUAL OPPORTUNITY BEHAVIORS

125 EO-AA affirmative action

126 EO-CLIM climate

127 EO-OPP opportunities/promotions

128 EO-TR training

129 EO-GEN general, policy, goals, other

RACIAL ISSUES - DISCRIMINATION AND BACKLASH

130 DISC-R racial discrimination (but not, e.g., "race relations")

131 BACK-RD backlash-reverse discrimination

132 BACK-SS backlash-smoke screens/frivolous complaints

GENDER ISSUES

133 DISC-G discrimination-gender

134 SEXH sexual harassment

135 WIC/WAS women in combat/women at sea

OTHER

136 DITTO "ditto" = response indicating "same as item 96 above"

137 DOWN downsizing adjustments

138 RECRU recruitment

139 LEADER leadership issues

140 OTHER mention of any other: e.g., communication, quotas, fraternization, gavs

Item 98: What are the greatest strengths of your Service's or agency's EO programs? (Please list them in order of strength, with 1 as the greatest strength.)

142 LEADER leadership/management characteristics; supportive officers

143 CLIMATE positive climate; respect prevails; sensitivity; commitment; positive attitude

144 COMM communications

145 ORGANIZ organization; structure; clear plan

146 EDUC/TRAIN EO training, education, instruction

147 OPPORT EO; promotion chances

148 POLICY policy is clear, appropriate

149 FAIR rules are fairly applied; system is honest; unbiased

150 AFF/ACT affirmative action

151 EO-GEN EO in general

152 OTHER other; e.g., personnel, statistical reviews, teamwork, professional

attitude, diversity

Item 99: What are the three greatest weaknesses of your Service's or agency's programs? (Please list them in order of weakness, with 1 as the greatest weakness.)

- 154 LEADER leadership/management problems; leader sensitivity; maintaining focus of leaders
- 155 EO-CONCERN EO concerns for, e.g., rule complexity, vague goals, bureaucratic, smoke screening/frivolous complaints, backlash; effort/time demanded by complaints
- 156 EO-SUPPORT need more EO emphasis
- 157 SOCIAL social pressures, social factors, problems in society
- 158 FAIR fairness, consistency
- 159 EDUC/TRAIN education needs, training
- 160 OTHER other; e.g., communication, oversensitivity, some do not get the EO message, downsizing

Item 100: What are the three most important elements of an effective EO program? (Please list them in the order of importance, with 1 as the most important.)

- 162 LEADER leadership: commitment, leader climate, involvement, middle management
- 163 EDUC/TRAIN education, training
- 164 COMM communication, clarity/openness/open-minded/free of fear/trust, QA
- 165 EOEO climate, priority, support level, commitment, awareness, recruitment
- 166 FAIR/CONSIST fairness, justice, consistency of discipline/enforcement
- 167 OTHER other: e.g., facts, correction of past errors, enforcement, mentoring, relevance, credibility, walk the talk, feedback, measurement systems/metrics

Item 101: Please make any other comments you would like about EO issues.

- 169 EO-SUPPORT EO support: need more EO personnel, need more sensitive leaders
- 170 EO-CONCERN EO concerns & backlash issues: complex rules, vague goals, smoke screens/frivolous complaints, problems in resolving conflicts/finding facts
- 171 SPEW (Quantity of words) behavioral measure of degree of written response defined by number of words written in response to item 101

a = zero b = 1-10 c = 10-50 d = 50-100 e = > 100